

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/680,079	10/07/2003	Kwan-Ho Chan	CHAN-33 CON	9937	
Mark J. Pandis	7590 03/14/2007 Scio		EXAM	INER	
Pandiscio & Pandiscio			WOO, JU	WOO, JULIAN W	
470 Totten Por Waltham, MA			ART UNIT PAPER NUMBER		
			3731		
		· · · · · · · · · · · · · · · · · · ·			
SHORTENED STATUTO	RY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MONTHS		03/14/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)	
	10/680,079	CHAN, KWAN-HO	
Office Action Summary	Examiner	Art Unit	
	Julian W. Woo	3731	
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet w	ith the correspondence address	
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the main earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNI 1.136(a). In no event, however, may a and will apply and will expire SIX (6) MON tute, cause the application to become Al	CATION. reply be timely filed ITHS from the mailing date of this communication BANDONED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on <u>05</u>	January 2007.		
· <u> </u>	nis action is non-final.		
3) Since this application is in condition for allow	•	• •	S
closed in accordance with the practice under	r Ex parte Quayle, 1935 C.L). 11, 453 O.G. 213.	
Disposition of Claims			
4) ☐ Claim(s) 8.17.19-21.23.31.32.36 and 38-41 is 4a) Of the above claim(s) is/are withdrest 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 8.17.19-21.23.31.32.36 and 38-41 is 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and Application Papers	rawn from consideration.	tion.	•
9)☐ The specification is objected to by the Examin	ner.	•	
10) The drawing(s) filed on is/are: a) □ ad	• • • • •	·	
Applicant may not request that any objection to the	- · · · · · · · · · · · · · · · · · · ·		/ N
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the		•	(a).
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a list	nts have been received. nts have been received in A iority documents have been eau (PCT Rule 17.2(a)).	pplication No received in this National Stage	
Attachment(s)	40 □ 1.1	(DTO 440)	
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	Paper No(Summary (PTO-413) s)/Mail Date nformal Patent Application 	

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 8, 20, 21, 23, 36, and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Violante (3,840,017). Violante discloses, at least in figures 1 and 2 and col. 2, lines 3-15; a surgical apparatus for delivering and retrieving suture (32), where the apparatus includes a cannula (20) having a distal end and a proximal end and a lumen extending therebetween; a handle(10) having a distal end and a proximal end, a passageway (22) extending through at least a portion of the handle, and an exposed, planar surface with a platform (28) disposed between the passageway and the distal end of the handle, where the proximal end of the cannula is attached to the handle and the lumen is in communication with the exposed surface of the handle, where the exposed surface is adapted to support a suture extending through the handle and allow movement of suture with a thumb or finger, where the passageway is provided with an opening (24) at the handle proximal end, where the opening is positioned to permit suture to be fed into the opening along a pathway parallel to the lumen (when the spool is removed for threading of the suture into the passageway), and where the distal end (42) of the cannula is configured to drive a suture against tissue without severing the suture.

Application/Control Number: 10/680,079 Page 3

Art Unit: 3731

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 4. Claims 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Violante (3,840,017). Violante discloses the invention substantially as claimed, but does not disclose that the exposed surface ranges from about 3/8 to about 3½ inches in length and does not disclose that the handle has a generally triangular, transverse cross-section. Nevertheless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to size the exposed surface in the range as claimed, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. With respect to the limitation of the handle having a generally triangular, transverse cross-section: It would have obvious to one having ordinary skill

in the art at the time the invention was made to shape the handle as claimed, since it has been held to be a matter of obvious design choice and within the general skill of a worker in the art (as the applicant has also admitted) to shape the handle according to its intended use.

Page 4

5. Claims 31 and 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Violante (3,840,017) in view of Burkhart et al. (5,681,333). Violante discloses the invention substantially as claimed. Violante discloses a surgical apparatus including a passer assembly with a handle and a cannula with a lumen, the handle including a passageway in an elongated body, a recess in the body defining a planar surface, and a nose portion extending distally of the recess and defining a bore in communication with the passageway, the planar surface, and the lumen. However, Violante does not disclose a puller assembly or loop retriever including a suture engager movable through the nose portion bore, through the cannula lumen, and distally to connect to a suture and proximally to withdraw the suture engager and the connected suture. Claim 38 is rejected under 35 U.S.C. 102(e) as being anticipated by. Burkhart et al. teach, in figures 6-9, a surgical apparatus for delivering and retrieving suture, where the apparatus includes a passer assembly (50) and a puller assembly (66) or loop retriever (70), where the passer assembly includes a handle (54) and a cannula (60), where the handle comprises an elongated body having a passageway extending distally from a suture entryway (62) axially disposed at a proximal end of the body, a recess (56) in the body defining a planar surface extending along an axis of the passageway, and a nose portion (distal end of 54) extending distally of the recess, where the puller assembly or

Application/Control Number: 10/680,079

Art Unit: 3731

loop retriever (70) is movable through the passageway, the nose portion, and cannula of the passer assembly. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made, in view of Burkhart et al., to include a puller assembly as claimed with the apparatus of Violante. Such an assembly would allow the advancement (and retrieval) of suture and suture loops (without breakage) in the small confines of Violante's passer assembly and surgical spaces as in a subacromial space.

Page 5

6. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Violante (3,840,017) in view of Burkhart et al. (5,681,333), and further in view of Goldrath (5,330,488). Violante in view of Burkhart et al. discloses the invention substantially as claimed, but does not disclose a puller assembly that is a hook retriever. Goldrath teaches, in col. 5, lines 42-48, a puller assembly that can be a loop retriever or a hook retriever, among other configurations. Thus, it would have been a matter of obvious design choice to configure the puller assembly of Violante in view of Burkhart et al. as a loop retriever or a hook retriever. The choice would be dependent upon a user's desired performance features for a retriever, and most important, whether the retriever is able to capture suture.

Response to Amendment

7. The rejection under 35 U.S.C. 112, 2nd paragraph is hereby withdrawn.

Applicant's arguments with respect to claims 31, 32, 38, and 39 have been considered but are most in view of the new ground(s) of rejection. With respect to arguments

Art Unit: 3731

regarding the rejection of claims 8, 17, 19, 20, 23, 36 based on the Violante reference: See the restatement of the rejection above. That is, Violante discloses a handle passageway with a proximal opening aligned with the longitudinal axis of the passageway, so the opening is in a position to permit suture to be fed into the opening along a pathway parallel to the passageway, where suture can be fed into the opening without the application of a spool or reel (or with an unmounted spool or reel). Violante discloses, in col. 2, lines 11-15, that the spool or reel is removable, so it is simply a convenient, and even optional, means for providing an extended length of suture material. The angling of the suture pathway, as illustrated in figure 2, occurs only after the suture has been threaded into the opening and the passageway along a pathway parallel to the passageway and after the spool or reel is rotatably mounted on the axle or pivot pin (30).

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Application/Control Number: 10/680,079

Art Unit: 3731

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Page 7

Application/Control Number: 10/680,079 Page 8

Art Unit: 3731

9. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Julian W. Woo whose telephone number is (571) 272-

4707. The examiner can normally be reached Mon.-Fri., 7:00 AM to 3:00 PM Eastern

Time, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Anh Tuan Nguyen can be reached on (571) 272-4963. The fax phone

number for the organization where this application or proceeding is assigned is (571)

273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Julian W. Woo

Primary Examiner

Julian M. Moo

March 12, 2007